

CLAIMS

1. A method performed in one single transceiver for allocating transmission capacity between the two directions of transmission in wire line data communication, **characterised by the step**
5 of allocating from said single transceiver different parts of the available bandwidth to different duplex methods simultaneously.
2. A method according to claim 1, comprising using the Zipper technique for the data transmission.
- 10 3. A method according to any one of the preceding claims, wherein the step of allocating comprises allocating a first frequency band comprising the lowest available frequency band to full duplex with echo cancellation.
- 15 4. A method according to any one of the preceding claims, wherein the step of allocating comprises allocating at least two frequency bands to FDD, said FDD bands following a first band in frequency, which is used for full duplex with echo cancellation, at least one of the FDD bands being used for upstream transmission and at least one for downstream transmission.
- 20 5. A method according to any one of the preceding claims, wherein the step of allocating comprises allocating a frequency band for the highest of the available bandwidth to burst mode duplex.
- 25 6. A method according to any one of the preceding claims, wherein the step of allocating comprises allocating a frequency band of the available bandwidth to TDD.
7. A computer program product directly loadable into the internal memory of a processing means within a computer placed in a transceiver, comprising the software code means for
30 performing the steps of any of the claims 1-6.

8. A computer program product stored on a computer usable medium, comprising readable program for causing a processing means in a computer placed in a transceiver, to control an execution of the steps of any of the claims 1-6.

5 9. A transceiver adapted to be positioned in communication sites of a wire line data communication system, said transceiver being adapted to transmit and receive data in the system and comprises a control unit (15) adapted to control the functions of the transceiver, **characterised in that** said control unit (15) is adapted to control the transceiver to allocate different parts of the available frequency bandwidth to different duplex methods
10 simultaneously.

10. A transceiver according to claim 10, wherein the control unit (15) is adapted to control an echo canceller (13) in the transceiver to only echo cancel signals received in the transceiver in certain predefined frequency bands.

15 11. A transceiver according to claim 9 or 10, comprising means for using the Zipper technique for the data transmission.

20 12. A transceiver according to any one of the claims 9-11, wherein the control unit (15) is adapted to control the transceiver to allocate a first frequency band comprising the lowest available frequency band to full duplex with echo cancellation.

25 13. A transceiver according to any one of the claims 9-12, wherein the control unit (15) is adapted to control the transceiver to allocate at least two frequency bands to FDD, said FDD bands following a first band in frequency, which first band is used for full duplex with echo cancellation, at least one of the FDD bands being used for upstream transmission and at least one for downstream transmission.

30 14. A transceiver according to any one of the claims 9-13, wherein the control unit (15) is adapted to control the transceiver to allocate a frequency band for the highest of the available bandwidth to full duplex in burst mode.

15. A transceiver according to any one of the claims 9-14, wherein the control unit (15) is adapted to control the transceiver to allocate a frequency band of the available bandwidth to TDD.